

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

CALLAWAY GOLF COMPANY,)	
)	C. A. No. 06-91 (SLR)
Plaintiff,)	
)	
v.)	
)	
ACUSHNET COMPANY,)	
)	
Defendant.)	
)	

**ACUSHNET'S BENCH MEMORANDUM REGARDING THE TESTIMONY
OF DR. RISEN ON THE SUBJECT OF COMMERCIAL SUCCESS**

Acushnet files this bench memorandum to address a matter left unresolved at the pretrial conference: the testimony of Dr. Risen, Callaway's validity expert and a chemist with no background or training in sales or marketing, regarding the relative importance of the performance of the Pro V1 in that ball's commercial success. Acushnet first raised this issue as an *in limine* matter in the proposed pretrial order. [D.I. 334 at Ex. 14, no. 9]. While the issue was not addressed at the pre-trial conference, Dr. Risen may testify as early as this afternoon. Acushnet seeks to preclude Dr. Risen from testifying that the primary reason for the Pro V1's commercial success was practicing the patents-in-suit.

Dr. William M. Risen is a professor of chemistry at Brown University. He is not an economist; nor does he possess any special skill or expertise in marketing, advertising, consumer surveys or branding. Acushnet believes that in addition to eliciting technical testimony as to the primary considerations of obviousness, Callaway intends to have Dr. Risen testify that the Pro V1 golf ball enjoyed extraordinary commercial success, and that this commercial success was primarily due to the ball's incorporation of Sullivan's patents. Dr. Risen devotes several pages of his report to advancing this assertion. Ex. 1, Risen Report at ¶¶ 217-243. Acushnet does not seek to exclude testimony from Dr. Risen that the Pro V1 was a success, or even that the technology of the patents-in-suit may have been one reason for that success. What Dr. Risen is

not qualified to opine on, however, and what Acushnet requests the Court to exclude from his testimony, is his assessment of which of the factors leading to the Pro V1's commercial success was the most important.

Proof of commercial success requires a different kind of expertise than obviousness in the main. To go further, and not only prove commercial success but also allocate the reasons for that success to different contributing factors, requires an even higher level of expertise in areas distinct from those in which Dr. Risen is qualified. In contrast to the technical facts needed to prove the "primary considerations" of obviousness, "to establish commercial success, the patentee must be armed with evidence of market share, growth in market share, and replacement of prior sales by others." *Brand Mgmt. v. Menard, Inc.*, No. 97-1329, 1998 U.S. App. LEXIS 493, at *32 (Fed. Cir. Jan. 14 1998) (citing *Kansas Jack, Inc. v. Kuhn*, 719 F.2d 1144, 1150 (Fed. Cir. 1983)). Often, technical experts lack sufficient knowledge of these sales and market trends to offer opinions on commercial success. *See, e.g., Advanced Med. Optics, Inc. v. Alcon Inc.*, C.A. No. 03-1095-KAJ, 2005 U.S. Dist. LEXIS 5803, at *9 (D. Del. April 7, 2005); *Pfizer Inc. v. Teva Pharms. USA, Inc.*, 461 F. Supp. 2d 271, 276 (D.N.J. 2006) ("Dr. Helfgott's expertise in rheumatology does not qualify him as an expert about what all doctors generally consider when making prescription decisions.") (citing *In re Diet Drugs Liab. Litig.*, No. 1203, 2000 U.S. Dist. LEXIS 9037, *36 (E.D.Pa June 20, 2000)).

To be admitted under Rule 702, an expert must be qualified, his methods must be reliable, and the testimony must fit, or assist the trier of fact. *See Elcock v. Kmart Corp.*, 233 F.3d 734, 741 (3d Cir. 2000); *In re Paoli R.R. Yard PCB Litigation*, 35 F.3d 717, 742 (3d Cir. 1994). Dr. Risen's **technical** expertise and research simply does not qualify him to opine on the relative weight to be placed on the different reasons for the **commercial** success of the Pro V1 golf ball.

The case law is clear that a patent expert's technical expertise does not, alone, qualify him to testify to commercial success. In *Advanced Med. Optics, Inc. v. Alcon Inc.*, C.A. No. 03-1095-KAJ, 2005 U.S. Dist. LEXIS 5803, at *6-13 (D. Del. April 7, 2005), Judge Jordan

excluded the testimony of a technical expert, a doctor with expertise in cataract surgery, on the sales and market trends for the accused surgical equipment. The Court found that, despite the doctor's "many years of experience using such machines in the performance of cataract surgery," his testimony on the sales and market trends for the equipment would be excluded under Rule 702 because he lacked sufficient expertise on those subjects and his opinion lacked sufficient factual bases. *Id.* at *13.

Dr. Risen is a chemistry professor – not an expert on sales and marketing in the golf industry. His only experience with the golf industry was as a technical consultant. Ex. 2, Risen Tr. at 30:17-31:3; 33:23-41:5. As a consultant, he dealt "with the scientists and technicians in the laboratory." Ex. 2, Risen Tr. at 34:17-35:8.

Dr. Risen does not purport to be an expert on the Pro VI's commercial success. Dr. Risen candidly admits that he lacks "the kind of expertise that a market analyst or a financial analyst or a sales organization might have." Ex. 2, Risen Tr. at 249:2-250:4. His "industry" knowledge comes from personal experience such as "play[ing] golf" and "read[ing] magazines." Ex. 2, Risen Tr. at 249:2-250:4.

In addition to his lack of commercial-related experience, Dr. Risen failed to perform any meaningful investigation upon which to base his opinions. He did not conduct or commission any studies into the success of golf balls on the market. Ex. 2, Risen Tr. at 250:24-251:5. He has not seen any studies on the effect of brand loyalty or tour player endorsement on golfers' choice of golf balls. Ex. 2, Risen Tr. at 256:6-16. He has never seen any sales figures for any golf balls on the market. Ex. 2, Risen Tr. at 251:6-11 (excepting articles in golf magazines). He has not reviewed data on Acushnet's marketing expenditures. Ex. 2, Risen Tr. at 251:19-253:23.

The facts of *Advanced Medical Optics* are particularly analogous to the present case. There the technical expert admitted that he had no expertise in the sales and marketing of the accused products:

Dr. Olson admitted during his deposition that he lacks specialized training in analyzing sales or market trends for phacoemulsification machines

A. I'm not in sales and marketing, but I do see sales and marketing figures. ... I think I have an interest, but I don't claim any special expertise.

Advanced Med. Optics, Inc., 2005 U.S. Dist. LEXIS 5803, at *7-8 (quoting expert Dr. Olson's deposition). Dr. Risen admitted exactly the same thing in his deposition:

I certainly know something about the industry, and I've heard a fair amount about it. . . . But I don't have the kind of expertise that a market analyst or a financial analyst or a sales organization might have.

Ex. 2, Risen Tr. At 249:2-10. In *Advanced Medical Optics*, the Court found the expert's consultation with several colleagues to be an inadequate basis for his opinion regarding buying preferences in the industry:¹

Dr. Olson's opinion regarding the general preferences of other surgeons is speculative and not supported by reliable data. The basis for his opinion on this point is that two of his colleagues have preferences for devices with Occlusion Mode

Advanced Med. Optics, Inc., 2005 U.S. Dist. LEXIS 5803, at *9-12. Dr. Risen likewise admitted that his opinion regarding what influences golf ball purchasing decisions was based in large part upon his personal observations of people that he played with:

Well, to the extent that I can reflect what my personal experience is, it's, of course, limited to my personal experience, which means playing with some limited number of people in Rhode Island and Massachusetts and Florida and Arizona and various places that I've played.

Ex. 2, Risen Tr. At 257:23-258:3.

Furthermore, in *Advanced Medical Optics*, the court held that the fact that the technical expert was a surgeon himself and an "expert consumer" of the accused hardware did not justify admitting the testimony. *Advanced Med. Optics, Inc.*, 2005 U.S. Dist. LEXIS 5803, at *8-13. Dr. Risen is not even an "expert consumer" of golf balls. His experience with golf balls regards golf ball design – not purchase and use.

¹ The court also found it relevant that the technical expert did not supplement these personal observations with any sort of studies. *Advanced Med. Optics, Inc.*, 2005 U.S. Dist. LEXIS 5803, at *13 ("His comments also reveal that he does not know whether other surgeons agree with Bruce Wallace's view, nor has he conducted a survey to find out."). Neither has Dr. Risen. Ex. 2, Risen Tr. At 258:22-259:5

Dr. Risen simply does not have the training and experience to render an opinion on what caused the commercial success of the Pro V1. His ability to take a further step and to allocate responsibility for commercial success to individual causes, claiming “the primary reason for the commercial success of the Pro V1 is the increased performance obtained by using the patented invention,” Ex. 1, Risen Report at ¶ 243, must be even more in doubt. Dr. Risen, a chemist, simply is not qualified to opine as to the relative impact of marketing, professional endorsements, brand loyalty and other factors of that ilk as opposed to the balls’ performance. His testimony on the primacy of performance in generating commercial success is little more than his personal opinion unsupported by relevant training, experience, or industry analysis. Not only is such testimony of little probative value, and inadmissible opinion from a unqualified witness, but it is highly prejudicial. Dr. Risen’s technical expertise in an unrelated area lends unfair credence to what are really nothing more than unsupported, unsubstantiated, personal impressions.

Finally, Dr. Risen relies in part to form this opinion on the hearsay testimony of professional golfers that the Pro V1 ball performs well. Ex. 1, Risen Report at ¶ 234. For reasons already argued at length in this case, reliance on such hearsay is inappropriate.

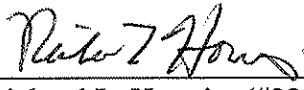
Thus, Acushnet objects under Rules 702 and 403 to the offer of any opinion by Dr. Risen on the relative importance of performance to the Pro V1’s commercial success.

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IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

CERTIFICATE OF SERVICE

I, Richard L. Horwitz, hereby certify that on December 11, 2007, the attached document was electronically filed with the Clerk of the Court using CM/ECF which will send notification to the registered attorney(s) of record that the document has been filed and is available for viewing and downloading.

I hereby certify that on December 11, 2007, I have Electronically Mailed (and hand delivered as noted) the document to the following person(s):

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Exhibit 1

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CALLAWAY GOLF COMPANY,

Plaintiff,

v.

ACUSHNET COMPANY,

Defendant.

C. A. No. 06-91 (SLR)

EXPERT REPORT OF WILLIAM M. RISEN, JR.

I. PERSONAL BACKGROUND

1. I am a Professor of Chemistry at Brown University. I have been retained by Callaway Golf as a consultant and expert witness in this case.
2. I have worked in the areas of ionomers, polyurethanes, molecular spectroscopy, organometallic chemistry, physical-inorganic chemistry, aerogels, quantized ion motion in condensed phases, and solid state chemistry. Based on my experience and education, I believe I am an expert in the chemistry and materials science of polymers and other amorphous materials.
3. I have been employed as a research and development consultant in the golf ball industry, in various capacities, for about 20 years. Based on this experience, I believe I possess expertise in the field of golf ball design.
4. I graduated from Georgetown University in 1962 with a B.S. in chemistry. I earned a Ph.D. in chemistry from Purdue University in 1967. I was a Research Fellow-Instructor at Brown University in 1966-1967. I was an Assistant Professor of Chemistry at Brown University 1967 to 1972. I was an Associate Professor of Chemistry at Brown University from 1972 to 1975. I have been a Professor of Chemistry at Brown University since 1975. From 1972 to 1980 I served as the chairman of the Department of Chemistry at Brown University.
5. I received a Foreign Invitational Fellowship from the Japan Society for the Promotion of Science for 2002-2003.
6. I was a Visiting Professor at McGill University in Montreal, Canada in 1991-1992.
7. In 1998, I was a Visiting Scientist at the Paul Scherrer Institute of ETH-Zurich and the Swiss Federal Science Foundation.

8. I am the author of over 100 publications and am named as an inventor on 37 United States patents, including 18 golf ball patents. A copy of my curriculum vitae is attached as Appendix A.

9. I have not testified as an expert witness within the last four years.

10. I am being compensated for the time I spend on this litigation at my standard rate of \$270 per hour.

II. SUMMARY OF WORK PERFORMED AND OPINIONS

11. I understand that, in this litigation, Callaway Golf has asserted that the Titleist Pro V1 family of golf balls, manufactured and sold by Acushnet, infringes various claims of the following four United States patents owned by Callaway Golf:

- U.S. Patent No. 6,210,293 ("the '293 patent")
Claims: 1, 2, 4, and 5;
- U.S. Patent No. 6,503,156 ("the '156 patent")
Claims: 1-11;
- U.S. Patent No. 6,506,130 ("the '130 patent")
Claims 1, 2, 4, and 5;
- U.S. Patent No. 6,595,873 ("the '873 patent")
Claims 1 and 3.

12. I also understand that Acushnet alleges that these patent claims are invalid in light of various prior art references. Acushnet has submitted an Expert Report of Dr. William J. MacKnight and an Expert Report of Dr. Robert J. Statz addressing validity.

13. I have been asked for my expert opinion regarding the validity of those patent claims in light of the prior art presented by Acushnet and, in particular, for my expert opinion regarding the analysis and conclusions of Dr. MacKnight and Dr. Statz.

14. As explained in detail below, it is my opinion that all of the asserted claims of the four patents listed above are valid over the prior art relied upon by Dr. MacKnight and Dr. Statz. In particular, I do not believe any of the asserted claims is anticipated by the prior art, nor do I believe that the invention described in any asserted claim would have been obvious to one of ordinary skill in the art at the time the invention was made.

15. Additionally, it is my opinion that Acushnet's U.S. Patent No. 5,885,172 includes claims to a urethane-over-ionomer multi-layer golf ball essentially the same as that claimed in the patents-in-suit. Acushnet's invalidity arguments, if accepted as evidence that the asserted claims are invalid, would also establish the invalidity of at least two claims of its own '172 patent.

16. In preparing this report, I have reviewed and/or relied upon portions of the materials listed in Appendix B.

215. I interpret Dr. Statz's report to concede that the Titleist Pro V1 and Pro V1x have, in fact, achieved extraordinary commercial success. (Statz ¶¶ 214-17.)

216. I therefore have no doubt that the Titleist Pro V1 and V1x have, in fact, been huge commercial successes.

(b) The Primary Reason for the Pro V1's Commercial Success is the Incorporation of Sullivan's Patented Technology

217. I believe that the tremendous success of the Pro V1 family of golf balls is directly attributable to the balls' superior performance. This performance is primarily the result of the use of the technology claimed in the patents-in-suit.

218. In a sworn affidavit submitted in the Bridgestone-Acushnet golf ball litigation, William Morgan, Acushnet's Senior VP of Research & Development for Golf Balls, stated the connection between the performance of the Pro V1 and its success:

The reason for the success of the Titleist Pro V1 beginning in 2000 is that like no other ball before it, Pro V1 delivered the combined attributes of long distance off the tee with soft feel and control into the green. (Morgan ¶ 73.)

219. Mr. Morgan also suggests that the success of the Pro V1 indicates that the ball represented a new idea – "The market's response to the Pro V1 clearly indicates that something new had been created." (Morgan ¶ 73.)

220. Mr. Bellis's declaration also states that the "superior technology that delivers superior performance" in the Pro V1 is the primary reason for the Pro V1's success. (Bellis ¶ 72.)

221. Mr. Love's declaration relies on a Golf Magazine article, "Great Leaps Forward," that cites the Pro V1 as the most recent of only fourteen "groundbreaking" golf inventions since 1890. (Love ¶¶ 17-18 and attached article.) Mr. Love quotes this article for its statement that "the Titleist Pro V1 'became the industry leader almost the minute it entered the market in the fall of 2000' due to its 'superior mix of distance and control around the greens.'" (Love ¶ 18.)

222. Attempting to deny the link between the Pro V1's performance and its commercial success, Dr. Statz downplays the Pro V1 as "a good performing golf ball" that achieves "good distance off the tee" in combination with "good spin and control." (Statz ¶ 218.) It is my understanding and belief that the performance of the Pro V1 is substantially better than "good," and that it is, in fact, exceptional. For example, sworn affidavits that Acushnet has submitted in its golf-ball litigation with Bridgestone characterize the Pro V1's performance with superlatives:

- "exceptional distance off the tee" (Love ¶ 12)
- "optimum spin profile" (Love ¶ 12)
- "the Titleist Pro V1 family of golf balls has performed better than any other solid golf ball I have tested" (Love ¶ 30)

- "long-flying, easy-to-control" (Bellis ¶ 68)
- "superior technology that delivers superior performance" (Bellis ¶ 72)
- "outstanding distance" (Bellis ¶ 74)

223. Nevertheless, Dr. Statz disputes that the commercial success of the Pro V1 and V1x is due to their use of the technology claimed in the patents-in-suit. (Statz ¶ 216.) He cites, among other factors responsible for the balls' success, Titleist's marketing and the influence of pro players on the buying public. (Statz ¶¶ 249-50.)

224. I do not dispute that Acushnet has a reputation for savvy marketing. However, I doubt that any product could be a commercial success without some degree of marketing, so I expect that a showing of a nexus between the patented technology and "commercial success" cannot be precluded by the fact that a product benefitted to some extent from marketing.

225. Moreover, Acushnet has aggressively marketed all of its premium golf ball products, including the Titleist Professional, which it sold prior to the introduction of the Pro V1. But by Acushnet's own statements and admissions, the Pro V1 was a great leap in performance and commercial success over the Acushnet balls it replaced. (See Bellis ¶ 40.) In particular, Mr. Bellis stated that "[w]hile solid construction balls existed on the market for a long time, none has had anything remotely approaching the success we have had with the Pro V1 family." (Bellis ¶ 71.) Clearly, marketing is not the primary reason for the success of the Pro V1.

226. I also note that Acushnet's marketing of the Pro V1 has emphasized its "resilient ionomer casing layer" and "high performance urethane elastomer cover." (E.g. CW280214, CW329360.) Thus, to the extent Acushnet claims the balls' success has been due to marketing, it is important to consider that part of what is being marketed is the ball's superior construction and performance. If Acushnet's marketing of the Pro V1 has been successful, one of the factors contributing to that success is that the ball's design enables Acushnet to advertise the urethane outer cover and ionomer mantle and their effects on performance.

227. Other varieties of Titleist and Pinnacle golf balls, including previous generations of such balls, have also been the subject of Acushnet's marketing, and that none of those balls has sold as well as the Pro V1 and V1x. (See Bellis ¶ 40.) In particular, Mr. Bellis stated that "While solid construction balls existed on the market for a long time, none has had anything remotely approaching the success we have had with the Pro V1 family." (Bellis ¶ 71.)

228. Dr. Statz states, "If the technology of the patents-in-suit were such a breakthrough over the prior art, I would have expected Spalding to have taken advantage of this technology well before it did." (Statz ¶ 251.) This is speculation. Neither Dr. Statz nor I knows the reason Spalding did not commercialize Sullivan's urethane-over-ionomer invention sooner, but it could have been due more to business and manufacturing considerations than any lack of faith in the performance of the urethane-over-ionomer construction.

229. For example, Top-Flite's production facilities in the mid-90's were optimized for ionomer covers, not for urethane covers. Also, urethane is comparatively more expensive than Surlyn,

and Top-Flite was concerned that, because of the positioning of its brand, it could not successfully market a ball at the price it would have to charge for a urethane-covered product.

230. Dr. Statz argues that, if the success of the patented technology were responsible for the success of the Pro V1 and V1x, then the Callaway Golf Rule 35 ball, which also embodies some of Sullivan's claims, would have taken a large share of the golf ball market. (Statz ¶ 249.) This again is speculation. There are many reasons which could explain why Acushnet succeeded in selling the Pro V1 while Callaway Golf struggled with the Rule 35.

231. Moreover, there is evidence showing the relative success of an Acushnet golf ball that uses the patented technology (the Pro V1) versus one that did not (the Titleist Professional). In the case of Callaway Golf, the Rule 35 was its first golf ball product, so there is no other Callaway Golf ball against which to compare the Rule 35.

232. Before the introduction of the Pro V1, most Titleist-sponsored players had been playing the Titleist Professional. (Statz ¶ 246.) Thus, assuming the "pyramid of influence" marketing strategy worked equally well for the Professional as it has for the Pro V1, the fact that Acushnet subsequently sold far more Pro V1's than Professionals to amateurs suggests that the "pyramid of influence" alone cannot explain the increased sales of the Pro V1.

233. The difference, I believe, is related to the difference in performance. As Mr. Bellis notes in his declaration, the Professional was not as good a ball for amateur players as the Pro V1 because the Professional "was less durable, had too much sidespin and [was] not as long" as other balls. (Bellis ¶ 74.) In contrast, Mr. Bellis notes that the Pro V1 "provides outstanding distance, durability, not-too-much sidespin [and] 'drop and stop; control' better than any other ball for average golfers, just like it does for the Tour Pros." (Bellis ¶ 74.)

234. Tour pros have confirmed that the factors Mr. Bellis cites here are what makes the Pro V1 perform well. For example:

- Ernie Els: "The Pro V1 is great. The ball goes farther and I spin the ball better." (CW366591.)
- Vijay Singh: "It flies higher. It flies farther. It stops on the green. It does everything you want a golf ball to do." (CW366591.) "The ball goes forever. And you can stop the ball, you can spin the ball. it's pretty much what everyone is looking for." (CW366588.)
- Lee Westwood: "With the Pro V1, I'm definitely longer off the tee, but I'm not giving up anything in terms of control. It feels soft, and there's plenty of spin around the green." (CW280216.)
- Steve Stricker: "It's made a big difference in my game. Around the greens, it's phenomenal. I'm able to spin the ball a lot more than I've ever been able to before." (CW366591.)
- Mike Weir: "You can see the difference in the distance, the trajectory, and the feel around the greens. It's really a big move forwards." (CW366591.)
- Steve Elkington: "The Pro V1 has the combination of going far off the tee, getting more control with the short shots, and having a soft feel around the green." (CW366591.)

- Davis Love III: "The Titleist Pro V1x gives me more control and feel around the greens. Ball flight, extra distance, and more control is a pretty good package." (CW366588.)

235. The enhanced durability, low sidespin, superior distance, and better controllability of the Pro V1 vis-a-vis the prior art are all attributable to Sullivan's technology.

(i) "Enhanced durability" comes from the use of a polyurethane outer cover thick enough to resist cuts and scuffs but thin enough to have a negligible effect on longer shots. Previously, "durability" was associated with hard ionomer covers, which were notorious for having poor feel and spin. Balata and soft ionomer covers had better feel and spin, but were not durable. Urethane covers on prior art balls lacking the other patented features were more durable than balata or soft ionomer covers, but tended to diminish distance and add unwanted spin.

(ii) "Low sidespin" and "superior distance" both result from the relative thinness of the outer cover and the presence of the hard ionomer inner cover. When hit by a driver or a longer iron, the ionomer character of the ball dominates, producing low spin and good distance.

(iii) Better controllability results from the urethane outer cover. When hit with a short iron, the urethane character of the ball prevails over the ionomer character. The oblique contact between the clubface and the urethane cover imparts spin to the ball, which allows skilled players to manipulate shots around the green.

236. Dr. Statz suggests that the aerodynamics and core composition of the ball, as well as quality control and manufacturing methods, are also responsible for the Pro V1's success. (Statz ¶¶ 220-26.) I am aware of no evidence that suggests that any of these factors is nearly as important to the Pro V1's performance, and success, as the incorporation of Sullivan's cover technology, and Dr. Statz cites none.

237. I note that for the 2005 versions of the Pro V1 and V1x, Acushnet reformulated the core compositions. (E.g. CW329359-62, CW334982.)

238. I also note that Acushnet redesigned the 2007 version of the Pro V1 and V1x to have "enhanced aerodynamics." (Bellis ¶ 77.) Presumably, there was some room for improvement in the previous aerodynamic design that warranted this change. Again, Dr. Statz does not cite any figures showing that this change improved the commercial success of the Pro V1 or V1x.

239. By contrast, I observe that Acushnet has never made any change to the fundamental design of the Pro V1 cover layers – since the Pro V1's introduction in 2000, every version of the Pro V1, V1x, and V1 Star has had a polyurethane outer cover over an ionomer inner cover. I observe that Dr. Wilkes has concluded that all of these versions infringe the asserted claims.

240. It appears, therefore, that the aspects of the Pro V1 covered by the Sullivan patents have performed well enough that they have not required any redesign, whereas the same cannot be said for the ball's aerodynamics or core.

241. Furthermore, although I do not doubt that Acushnet holds patents on multiple aspects of the Pro V1, I have observed that many of the patents listed on the Pro V1 packaging were filed after 2000, when the original Pro V1 was introduced and became an immediate success.

242. Therefore, I believe that the technology most proximately responsible for the Pro V1's superior performance and immediate success was the urethane-over-ionomer multi-layer construction described in the Sullivan patents, and incorporated into the original Pro V1 ball. By the time any incremental changes were made to later versions of the Pro V1, the ball was already an overwhelming success, and I am not aware of any evidence that any of these later changes caused any increase in sales of Pro V1 balls.

243. Because marketing cannot explain the success of the Pro V1 over its predecessors, and because the factors most often associated with the Pro V1's superior performance are all attributable to the incorporation of Sullivan's technology, I believe that the primary reason for the commercial success of the Pro V1 is the increased performance obtained by using the patented invention.

(c) The Pro V1 is "Commensurate in Scope" With the Asserted Claims

244. I disagree with Dr. Statz's conclusion that the Pro V1 is not "commensurate in scope" with the asserted patent claims.

245. Dr. Statz argues that none of the asserted claims is narrow enough to describe the exact construction of the Pro V1. (Statz ¶¶ 242-43.) Of course, that is not the case; the claim limitations are appropriate. He further argues that even if the Pro V1 embodies those claims, it is not "commensurate in scope" with any claim that could read on any other configurations. (Statz ¶¶ 243.)

246. Dr. Statz's argument focuses mainly on the claims that recite a range of thicknesses for the inner and outer cover layers. (Statz ¶¶ 234-37.) I note, first of all, that not all of the asserted claims include limitations on the thickness of the cover layers. (See, for example, '293 claim 4.)

247. For the claims that do recite ranges of thicknesses for cover layers, I observe that these ranges are limited to a reasonable, narrow range that works. The largest range claimed for a cover thickness is 0.010" to 0.100". The difference between a cover layer .010" thick and one .100" thick is only .090", which represents only 11% of the radius of a 1.68" diameter golf ball. (See, for example, '873 claim 1, inner cover.) Some claims recite a range of 0.020" to 0.070", a span of 0.050", which is 6% of the radius of a standard-size golf ball. (See, e.g., '873 claim 1, outer cover.) Some dependent claims (e.g. '156 claims 3, 11) are more narrow still, reciting ranges of 0.030" to 0.060", a difference of only 0.030", or 3.6% of the ball's radius.

248. I am not aware of any rule under which an infringing product is not "commensurate in scope" with the infringed claim simply because the claim does not recite every specific detail of the product's construction, or when the infringer has availed himself of a claimed range by selecting a property within, but not fully coextensive with, that range.

were redesigned for the 2007 versions of those products. (Bellis ¶ 77.) Mr. Bellis also states that the 2007 Pro V1x has a softer cover than before. (Bellis ¶ 77.)

303. Thus, although Acushnet has implemented various changes to the Pro V1 balls since their introduction, Acushnet has never changed the design in a way that would avoid infringement of the patents-in-suit.

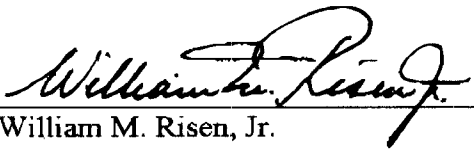
304. Dr. Statz explains that Acushnet obtained opinions of counsel stating that the patents-in-suit were invalid, and that Acushnet has consequently felt it unnecessary to design around those patents. (Statz ¶ 271.) I do not see how Acushnet could reasonably have relied on these opinions, however, since Acushnet has successfully prosecuted patent claims on a urethane-over-ionomer multi-layer construction that are very similar to the claims of the patents-in-suit. (See paras. 198-209 above.)

305. Given that Acushnet could not have reasonably believed that the patents-in-suit were invalid, that the Pro V1 balls infringe these patents, and that infringement of these patents carries the risk of sizable liability, I have to assume that Acushnet would design around the patents if it were possible to do so without losing the performance advantages the patented technology confers.

VIII. CONCLUSION

306. I reserve the right to rebut any arguments or evidence offered in response to this report, and to supplement this report based on newly presented evidence or further analysis. I also reserve the right to supplement or amend this report based on the Court's construction of the patents-in-suit. I also intend to use graphics and/or demonstrative exhibits to illustrate some of the facts and opinions I have stated here.

Dated: July 6, 2007


William M. Risen, Jr.

CERTIFICATE OF SERVICE

I hereby certify that on July 6, 2007, I served the **EXPERT REPORT OF WILLIAM**

M. RISEN, JR. on opposing counsel at the following addresses in the following manner:

VIA EMAIL AND FEDERAL EXPRESS

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rhorwitz@potteranderson.com

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COMPANY

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Attorneys for Plaintiff
CALLAWAY GOLF COMPANY

APPENDIX A

CURRICULUM VITAE

William M. Risen, Jr.

Professor of Chemistry
Department of Chemistry
Brown University
Providence, Rhode Island 02912
401-863-2611 (phone) –9046 (fax)
WRISEN@BROWN.EDU

Born: July 22, 1940, St. Louis, Missouri.

Home Address:
87 Miller Avenue
Rumford, Rhode Island 02916
401-438-3470 (phone)
401-378-8075 (cell)
WRISEN@COX.NET

Education:

Walnut Hills High School, Cincinnati, Ohio, 1958
Sc.B. Chemistry, (Chemistry Honors), Georgetown University, 1962
Ph.D. Chemistry, Purdue University, 1967
Sigma Xi, Phi Lambda Upsilon, Monsanto Fellow

Employment:

Brown University

1975-	Professor of Chemistry, Brown University
1972-1980	Chairman, Department of Chemistry, Brown University
1972-1975	Associate Professor of Chemistry
1967-1972	Assistant Professor of Chemistry
1966-1967	Research Fellow-Instructor, Brown University
	F. M. C. Fellow

External Appointments

1991-1992	Visiting Professor McGill University, Montreal, Canada
1998	Visiting Scientist: Paul Scherrer Institute of ETH-Zurich and Swiss Federal Science Foundation.
2002 - 2003	Foreign Invitational Fellowship, Japan Society for the Promotion of Science.

Affiliations:

American Chemical Society
Materials Research Society
Sigma Xi

Institutional Service (Brown University):

Chair of the Brown University Faculty 1993 - 1994
 Chairman, Department of Chemistry, 1972 – 1980
 Faculty Executive Committee, 1992-1995, Vice Chair 1992 - 93; Chair 1993-1994
 Associate Director, Materials Research Laboratory, 1981 – 1986

Inorganic Glasses Research Group (Materials Research Laboratory)
 (Coordinator), 1973 - 1986
 Advisory Committee on the Resumed Undergraduate Education
 Program, 1972 - 1976
 Physical Science Council, Brown University 1972 - 1977
 Department Chairmen Agenda Committee, 1973 - 1980
 Task Force on Non-Academic and General Affairs of the University
 (Chairman), 1974 - 1975
 Minority Student Advisor, 1977 – 1981
 Freshman Advisor, 1981 – 1991; 1997 – 2001
 Sophomore Advisor, 1992 – 1996; 1998- 2001
 Task Force on Research, (Chair), 1978 - 1979
 Center for Energy Studies, Executive Committee, 1978 - 1984
 Chemistry-Geology Building Planning Committee, Chair, 1979 - 1980
 Campus Advisory Committee on Special Studies, 1982 - 1984
 University Research Council, 1981 - 1987
 Project on Compensation-Coordination Committee, 1981
 Dean of College Committee on Integrated Curricula, 1984
 Departmental Committees; Graduate Admissions 1968 –72, 2004 - 2006 (Chair) 1999-
 2001 Curriculum Committee, 1984; Undergraduate Program, 1999 (Chair),
 Preliminary and Ph. D. thesis committees 1966 – 2006 Committee on Admissions
 and Financial Aid (CAFA), 1985 - 1988; Chair, 1987 - 1988

Committee on South Africa, 1985 - 1986
 Faculty Scholars Fund, Board 1982 - 1990
 Division of Engineering Visiting Committee, 1986 - 1987, Chairman
 Athletic Advisor, 1984 - 1987, 2006 -
 Charles Evans Hughes Society; Executive Committee, 1986 - 1990
 Dean of Admission and Financial Aid, Selection Committee, 1987 – 1988
 Center for Advanced Materials Research, Executive Committee,
 1988-1992

Advisory Council: Center for the Advancement of College Teaching,
 1990 -96, Executive Committee, 1996- 2003
 Committee to Select the Director of Campus Security, 1990 - 1991
 University Task Force on Teaching Assistants, 1991
 Chemistry, Geology, Environmental Science Teaching Facility
 Committee, 1991- 1993, Chair
 Academic Advisor: Basketball, 1992 - 1995
 Athletic Advisory Council, 1990 - 1994, Chairman, 1990 - 1992
 Ad Hoc Committee on Financial Aid, 1992 - 1993

Faculty Agenda Committee, 1992 - 1995
 Brown University Sports Foundation, Board of Directors, 1992 -96
 Campus Ad Hoc Committee on Campus Safety, Chair (1992)
 Academic Council, Brown University, 1994-95
 Committee on Medical Faculty Appointments 1999 – 2003
 Captain, Brown University Police and Security, Selection Committee, 2007
 Faculty Advisor, Varsity Baseball, 2006 -
 Honorary Degree Advisory Committee,
 1996-2000, Chair 1997-2000, Chair 2005-07
 Sigma Xi, Scientific Honorary Society, President, Brown Univ., 2007-

External Service:

Technical Advisory Committee, Rhode Island Lung Assoc., 1969-76
 Consultant, National Science Foundation (Materials Science), 1977-82;
 National Science Foundation Visiting Committees:
 Stanford University (Chair),
 University of Chicago,
 Purdue University.
 Task Force on Cooperative Advances in Chemical Science and
 Technology, (Co-chairman) 1979-80
 NSF, DOD, DOE Program Reviews and Committees (various, 1968 -)
 American Chemical Society; Presidential Conference, 1980
 Board of Directors, Council for Chemical Research, 1980-82 (Founding Board)
 Provost's Science Advisory Committee, Georgetown University 1981 - 83
 American Chemical Society-Board/Council Committee on Chemistry
 and Public Affairs (CCPA) 1982-91
 Congressional Fellows Selection Committee (American Chemical Society-CCPA) Chair,
 1983-85
 Research and Development Funding Committee (American Chemical Society -CCPA),
 Chair, 1987-88
 National Research Council - Chemistry Task Force-Implementation
 Group
 Visiting Committee: Williams College
 American Chemical Society Accreditation Committee Ad Hoc
 WPI-Rutman Professor Selection Committee
 International Scientific Exchange Award, NSRC - Canada,
 sabbatical leave at McGill University, 1991
 External examiner; Faculty of Graduate Studies, McGill University, 1994, 1995, 1998.
 Visiting Scientist Fellowship, Paul Scherrer Institute, Switzerland, 1998
 Gordon Conference on Ion-Containing Polymers, Co-Chair, 1999.
 Judicial Performance Review for the Supreme Court of Rhode Island 1996- 2000
 Consultant: Chemical and Managerial Matters; US and International Companies and Law
 Firms
 Content Consultant - High School Chemistry; Merrill Publishing Co.,
 1988- 1992

Publications
William M. Risen, Jr.

1. Infrared Bands from Alkali Ion Motion in Solution, with W. F. Edgell, A. T. Watts, and John Lyford, IV, J. Amer. Chem. Soc. **88**, 1815 (1966).
2. The Mass Spectrum and Preparation of Pure Manganese Pentacarbonyl Hydride, with W. F. Edgell, J. Amer. Chem. Soc. **88**, 5451 (1966).
3. Rate of Air Oxidations of Vanadium(II) in Acidic Aqueous Media in the Presence of Anions, with J. E. Earley, Chem. Anal. **55**, 76 (1966).
4. The Infrared Spectrum and Vibrational Assignments for Pentacarbonyl-manganese Hydride, with W. F. Edgell, J. W. Fisher, and G. Asato, Inorg. Chem. **8**, 1103 (1969).
5. Spectroscopic Studies of Metal-Metal Bonding. I. Absorption and Laser Raman Spectra and Vibrational Analyses of $\text{Cl}_3\text{MCo}(\text{CO})_4$ (M = Sn, Ge, Si), with K. L. Watters and J. N. Brittain, Inorg. Chem. **8**, 1347 (1969).
6. Spectroscopic Studies of Metal-Metal Bonded Compounds, with K. L. Watters, Inorg. Chem. Acta Rev. **3**, 129 (1969).
7. Computer Animation: On-line Dynamic Display in Real Time, with J. S. Walton, J. Chem. Educ. **46**, 334 (1969).
8. Far Infrared Sealed Liquid Cell with Polyethylene Windows, with A. T. Tsatsas, Appl. Spectry. **24**, No. 3, 383 (1970).
9. The Photochemistry of Peroxodiphosphates. The Oxidation of Water and Two Alcohols, with R. L. Lussier and J. O. Edwards, J. Phys. Chem. **74**, 4039 (1970).
10. Quantized Ion Motion in Solution, with A. T. Tsatsas, J. Amer. Chem. Soc. **92**, 1789 (1970).
11. The Intermolecular Vibration of Ions in Solution, with W. F. Edgell, J. Lyford, IV, R. Wright, and A. Watts, J. Amer. Chem. Soc. **92**, 2240 (1970).
12. Cation Motion in Ionic Copolymers, with A. T. Tsatsas, Chem. Phys. Letters **7**, 354 (1970).

13. Vibrational Motion of Cations in Ionic Glasses, with G. J. Exarhos, *Chem. Phys. Letters* **10**, 484 (1971).
14. Cation Motion in Anionic Fields of the Polyelectrolytic Salts of Ethylenemethacrylic Copolymers, with A. T. Tsatsas and J. W. Reed, *J. Chem. Phys.* **55**, 3260 (1971).
15. Spectroscopic Studies of Metal-Metal Bonding. II. The Variation of Metal-Metal Bond Strengths and Substituents from the Vibrational Analyses of $X_3MCo(CO)_4$ ($M = Sn, Ge$; $X = I, Br, Cl$), with K. L. Watters and W. M. Butler, *Inorg. Chem.* **10**, 1970 (1971).
16. Cation Vibrations in Inorganic Oxide Glasses, with G. J. Exarhos, *Solid State Commun.* **11**, 755 (1972).
17. The Nature of Alkali Metal Ion Interactions with Cyclic Polyfunctional Molecules. I. Vibrations of Alkali Ions Encaged by Crown Ethers in Solution, with A. T. Tsatsas and R. W. Stearns, *J. Amer. Chem. Soc.* **94**, 5247 (1972).
18. Spectroscopic Studies of Metal-Metal Bonding. III. Vibrational Spectra and Analyses of $M[Co(CO)_4]_2$ ($M = An, Cd, Hg$), with R. J. Ziegler, J. M. Burlitch, and S. E. Hayes, *Inorg. Chem.* **11**, 702 (1972).
19. Spectroscopic Studies of Metal-Metal Bonding. V. Direct and Indirect Intermetallic Forces from the Vibrational Spectra and Analyses of $M_2Cl_9^{3-}$ ($M = Cr, W$) Ions, with R. J. Ziegler, *Inorg. Chem.* **11**, 2796 (1972).
20. Spectroscopic Studies of Metal-Metal Bonding. IV. Absorption and Laser Raman Spectra and Vibrational Analyses of $[(OC)_5Mn-M'(CO)_5]^-$ ($M' = Cr, Mo, W$), with J. R. Johnson and R. J. Ziegler, *Inorg. Chem.* **12**, 2349 (1973).
21. Vibrational Spectral Study of Molecular Orientation in Vitreous Fibers, with P. J. Miller and G. J. Exarhos, *J. Chem. Phys.* **59**, 2696 (1973).
22. Interionic Vibrations and Glass Transitions in Ionic Oxide Metaphosphate Glasses, with G. J. Exarhos and P. J. Miller, *J. Chem. Phys.* **60**, 4145 (1974).

Exhibit 2

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Callaway Golf Company v. Acushnet Company

William Risen

Page 1

IN THE UNITED STATES DISTRICT COURT
DISTRICT OF DELAWARE

CALLAWAY GOLF COMPANY,

Plaintiff,

vs.

Civil Action No.
06-91 (SLR)

ACUSHNET COMPANY,

Defendant.

Boston, Massachusetts
Friday, July 20, 2007
Volume I of II

Videotaped Deposition of
WILLIAM M. RISEN, JR., Ph.D.

The witness was called for examination by counsel for the Defendant, pursuant to notice, commencing at 9:41 a.m. at the Law Offices of Fish & Richardson, P.C., 25 Franklin Street, Boston, Massachusetts, before Kimberly A. Smith, Certified Realtime Reporter, Registered Diplomat Reporter, and Notary Public for the Commonwealth of Massachusetts, when were present on behalf of the respective parties:

DIGITAL EVIDENCE GROUP
1111 16th Street, N.W., Suite 410
Washington, D.C. 20036
(202) 232-0646

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1 Q. And you understand that currently the
2 status of the reexamination is that there's been an
3 initial office action rejecting all the claims in all
4 four patents? Do you understand that?

5 A. I've been told that.

6 Q. I want to just ask you a couple questions
7 about your background. If you can turn to your CV,
8 which is kind of in the middle of the exhibit,
9 Appendix A. There it is.

10 To your knowledge, is your CV, which
11 I'm sure gets updated a lot, but was it accurate at
12 the time that you submitted this report, to your
13 knowledge?

14 A. I believe so. There's always possibilities
15 of small errors, but I believe it's essentially
16 correct.

17 Q. I understand that you have consulted with
18 Spalding in the past, and Callaway in the past; is
19 that correct?

20 A. Yes.

21 Q. When did you first consult for Spalding?

22 A. For the Spalding Company, I believe it was
23 1989. It could have been 1990, but I believe it was
24 about then.

25 Q. And have you consulted with Spalding in its

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1 various corporate forms fairly consistently from that
2 time to the present?

3 A. Yes.

4 Q. When you first consulted with Spalding in
5 '89 or '90, did you sign a consultation agreement?

6 A. I don't recall signing one in the first --
7 early stages. I may have. But I don't have that in
8 my records.

9 Q. Do you remember at some point signing a --

10 A. Oh, yes.

11 Q. -- consultation agreement?

12 A. Yes.

13 Q. Do you remember approximately when the
14 first one that you recall is? Would it have been in
15 the '90s?

16 A. It would have been in the mid '90s, I think.

17 Q. How were you paid for your consultation?
18 Was it on an hourly rate?

19 A. Yes.

20 Q. And what was your rate when you first
21 consulted with Spalding; do you recall?

22 A. No.

23 Q. It was less than 270 an hour --

24 A. Yes.

25 Q. -- I assume?

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1 Can you give me a general sense for
2 how that rate has changed over time? Actually let me
3 back up and ask the first question first.

4 Is your consultation rate with
5 Spalding now \$270 an hour?

6 A. Yes. Well, it's with Callaway, but yes.

7 Q. With Callaway. How has that rate changed
8 over time since you first started consulting with
9 Spalding?

10 A. Well, it's gone up little by little, I
11 think it's fair to say, over about a 15-to-20-year
12 period. So it probably started somewhere around \$100
13 and graduated up.

14 Q. Forgive the personal nature of this
15 question, but do you have any idea or any sense for
16 how much money over the years Spalding and/or
17 Callaway has paid you for your consulting activities?

18 A. No.

19 Q. Do you know whether it's more than 100,000?

20 A. Yes.

21 Q. Do you know whether it's more than a
22 million?

23 A. I'd be surprised if it were that much
24 money.

25 Q. Okay.

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1 A. I'm quite sure it's not.

2 Q. Fair enough. Do you own any stock in
3 Callaway?

4 A. No.

5 Q. Have you ever owned any stock in Callaway
6 or Spalding other than through mutual funds or
7 anything like that?

8 A. No.

9 Q. I understand that you are a named inventor
10 on several patents that are owned by Callaway.
11 Is that right?

12 A. Yes.

13 Q. That relate to golf balls. Is that right?

14 A. Yes.

15 Q. Is there any incentive program or reward
16 program that you are a party to with respect to those
17 patents?

18 A. No.

19 Q. You've never received any monetary
20 recognition for your contributions to intellectual
21 property at the company?

22 A. That's right.

23 Q. Can you give me a rough sense for how your
24 time involvement has changed over time since the time
25 you first started working with Spalding in '89 or '90

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1 to the present?

2 A. Well, the time that I spent at Spalding and
3 then Top-Flite, and now Top-Flite is part of Callaway,
4 has been of two kinds. Some of it is episodic in
5 which there is a problem that arises, and a good deal
6 of time is needed to be spent in a concentrated way.
7 And sometimes it's not, in which I would spend a day
8 or more a month consulting at the R&D laboratories.

9 Q. Could you characterize your total
10 involvement over the years as increasing, decreasing,
11 steady, or without pattern?

12 A. I don't think there's a significant
13 pattern. It's been, as I said, some combination of
14 working with folks there and advising them about
15 technology on a regular basis, plus episodic
16 concentrations of time.

17 Q. Can you give me a sense generally of the
18 types of consultation that you have provided to
19 Spalding/Top-Flite/Callaway over the years?

20 A. The one kind that is fairly steady involves
21 working with the scientists and technicians in the
22 laboratory, trying to answer their questions, give
23 them some help in interpreting their data, perhaps
24 making suggestions about things they can try, helping
25 them understand some literature or locate some

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1 literature.

2 The ones that are episodic in nature
3 involve responding to some particular problem that
4 may be a problem in interpretation of literature.
5 Or it may be a problem in taking something to
6 manufacturing. Or it could be helping to expand on
7 some ideas to take them to further development or
8 something of the sort.

9 Q. What brought you to Spalding in the first
10 instance?

11 A. Well, I was asked to testify and work as an
12 expert in the case involving Spalding and Acushnet in
13 the early 1980s. At that time the law firm that
14 first contacted me was Lahive & Cockfield in Boston.
15 Eventually the case was taken over first by Alegretti
16 Witcoff in Chicago and then McAndrews, Held & Malloy
17 in Chicago. And I was asked to do various things in
18 preparation for the trial.

19 Then after all of it was over, some
20 years later the folks at Spalding thought that I had
21 indicated an interest and an ability in the field and
22 asked if I would be willing to consult with them.

23 Q. Was that experience in the early '80s
24 working with Spalding on that litigation your first
25 foray into golf ball-specific issues?

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1 A. Yes.

2 Q. And did you do any work in that field from
3 the time of that case to the time that you started
4 consulting with Spalding in '89 or '90?

5 A. Pardon me? Would you ask that again,
6 please?

7 Q. Sure. Between the time that you worked on
8 the litigation with Spalding in the early '80s and
9 the time that you began consulting with Spalding in
10 1989, did you do any other golf ball-related work?

11 A. Let me -- let me remind you of the time
12 scale a little bit. I think, starting in about
13 1983 -- although it could be a year or two one way or
14 the other -- the case between Acushnet and Spalding
15 involved various kinds of testing that I observed on
16 behalf of Spalding, and its attorneys. And then it
17 involved a hearing before a special master in Boston
18 District Court. And then it involved a trial. And
19 then it involved an appeal. And that dragged out
20 over about six years. And I believe the appeal
21 finally was nullified by a settlement between the two
22 companies. And I believe that happened in about
23 1989.

24 And so all of the work that I did
25 that had anything to do with golf between 1983

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1 approximately and 1989 had to do with supporting the
2 attorneys' efforts in that case. And when that was
3 over, then -- I believe it was Terry Melvin who was
4 in charge of the research and development operation --
5 asked me if I would consider consulting with the
6 company.

7 Q. Thanks. That makes more sense to me.
8 I didn't understand that time line.

9 You may have said this already, but
10 did you testify at trial in that Acushnet/Spalding
11 case?

12 A. I testified twice. First there was a
13 hearing in the -- before a special master at the
14 appointment of a district judge in the Federal
15 District for Boston. And I testified in that matter.
16 And then it went to a full trial, and I testified at
17 the trial.

18 Q. Was the nature of your testimony in those
19 two instances that of a factual percipient witness or
20 of an expert?

21 A. I believe I was there as an expert.

22 Q. And what was the general subject matter of
23 your testimony?

24 A. The initial testimony had to do with the
25 infringement of the patents -- the patent. Basically

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1 there was one patent at stake, I think, primarily.

2 I believe I was on the stand a little bit later in a
3 rebuttal role, but I don't recall much about that.

4 Q. And the issue there was whether Acushnet
5 infringed Spalding's patent?

6 A. Yes. It was a patent by Robert Molitor
7 from the early 1970s.

8 Q. Is this the blended ionomer?

9 A. That's correct.

10 Q. Do you recall whether you submitted an
11 expert report in that case?

12 A. I don't.

13 Q. And you weren't deposed in that case?

14 A. I don't believe so. I think trials --
15 cases were handled differently in those days.

16 Q. During the course of that case, did you
17 have an opportunity to work with or against Bill
18 MacKnight?

19 A. Professor MacKnight was, I believe, an
20 expert consultant to the law firm that represented
21 Acushnet. I don't recall that he testified.

22 Q. Do you recall analyzing any of
23 Dr. MacKnight's opinions?

24 A. I don't recall seeing any of his opinions.

25 Q. Do you know Professor MacKnight personally?

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1 A. Yes.

2 Q. Other than in the context of that
3 litigation, do you know him personally?

4 A. Yes. I think it's fair to say I've met him
5 at a number of professional society meetings, and at
6 least one time when I gave a lecture at the
7 University of Massachusetts.

8 Q. Do you have an opinion of his professional
9 reputation?

10 A. Yes.

11 Q. And what is that opinion?

12 A. It's very good.

13 Q. Would you consider him an expert in
14 polymeric materials?

15 A. Certainly the ones that he's studied.

16 Q. Do you know Bob Statz?

17 A. Less well than I know Professor MacKnight.
18 But Dr. Statz also has attended some professional
19 meetings that I've attended. And I've had a chance
20 to hear him talk. He's had a chance to hear me talk.
21 And we have had occasional social interactions at
22 those meetings.

23 Q. Do you have an opinion of his professional
24 reputation?

25 A. That's a little trickier because folks in

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1 industry, by and large, are not in a position to
2 reveal the details of their research as they develop
3 materials. He certainly is known as one of the
4 people responsible for the development in the '70s
5 and '80s, and perhaps later, of some of the materials
6 that he's worked on, including Surlyns.

7 Q. So I gather from that answer that because
8 of the nature of industry's work as opposed to
9 academia, that you haven't really had a chance to
10 form an opinion as to his professional reputation?

11 A. He has a professional reputation as a
12 chemist who has developed materials at and for DuPont
13 that has been expressed in some public fora and in
14 patents that is well regarded by those who use
15 materials of the sort that he's worked on.

16 But people in industry have a
17 different sort of reputation because it tends to be
18 wrapped up in the company's products rather than in
19 the independent research projects that are done in a
20 university laboratory.

21 Q. Other than your work with Spalding and
22 Callaway, have you ever -- do you have any other
23 experience specific to golf ball design or
24 development or construction?

25 A. Not if you include the legal work that I

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1 did.

2 Q. I do. Nothing else other than what you've
3 done with Spalding and Callaway? I'm wondering if
4 there are other companies that you may have consulted
5 with in this field?

6 A. I have not.

7 Q. During the course of your work with
8 Spalding and Callaway, have you ever conducted
9 performance tests on golf balls?

10 A. Golf balls perform in a lot of different
11 ways. Which ones do you mean?

12 Q. Well, let's start with things like initial
13 velocity and spin rate. Have you conducted those
14 sorts of tests on golf balls, or had tests conducted
15 at your direction?

16 A. I've certainly observed the tests being
17 carried out. I don't know that I've directed people
18 to do either spin testing or initial velocity
19 testing.

20 Q. In the course of your work with Spalding
21 and Callaway, have you tested hardness of materials,
22 or had that testing conducted at your direction?

23 A. I've certainly observed that test being
24 done a number of times on golf balls. But whether --
25 whether I was the specific director of those tests in

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IN THE UNITED STATES DISTRICT COURT
DISTRICT OF DELAWARE

CALLAWAY GOLF COMPANY,

Plaintiff,

vs.

Civil Action No.
06-91 (SLR)

ACUSHNET COMPANY,

Defendant.

ORIGINAL

Boston, Massachusetts
Saturday, July 21, 2007
Volume II of II

Videotaped Deposition of
WILLIAM M. RISEN, JR., Ph.D.

The witness was called for examination by counsel for the Defendant, pursuant to notice, commencing at 9:35 a.m. at the Law Offices of Fish & Richardson, P.C., 25 Franklin Street, Boston, Massachusetts, before Kimberly A. Smith, Certified Realtime Reporter, Registered Diplomate Reporter, and Notary Public for the Commonwealth of Massachusetts, when were present on behalf of the respective parties:

DIGITAL EVIDENCE GROUP
1111 16th Street, N.W., Suite 410
Washington, D.C. 20036
(202) 232-0646

1 more narrow, obviously.

2 Are you an expert in the market
3 conditions that have existed in the golf ball
4 industry over the last 15 years?

5 A. I don't -- I certainly know something about
6 the industry, and I've heard a fair amount about it.
7 I play golf and I read magazines. And so I know
8 something about it. But I don't have the kind of
9 expertise that a market analyst or a financial
10 analyst or a sales organization might have.

11 Q. Do you consider yourself to be an expert in
12 that area?

13 A. In?

14 Q. Market conditions of the golf ball industry
15 in the last 15 years.

16 A. I know some aspects about it. I don't know
17 all of them.

18 Q. Do you consider yourself to be an expert in
19 the demand for golf balls over the last 10, 15 years?

20 A. Not quantitatively. I have some idea what
21 golfers like to play and what the pros have played
22 and what kinds of balls respond to the needs of
23 people, simply by playing golf, talking to golfers,
24 reading golfing magazines, talking to people in the
25 Top-Flite/Callaway company about the kinds of

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1 products they would like to develop for different
2 markets and so forth. But I have not sold any golf
3 balls. I haven't marketed them. And I haven't
4 studied the field as a financial analyst.

5 Q. Have you ever reviewed or studied customer
6 surveys regarding their preferences for golf balls?

7 A. I've looked at some, but not in an
8 analytical fashion.

9 Q. In what context have you looked at
10 information like that?

11 A. Oh, I've attended meetings in the research
12 and development world where people would say there is
13 a need for this or that kind of a golf ball. And
14 they would sometimes back it up by saying that we
15 have a survey that says that softer balls are more
16 popular than harder ones at this time or balls with
17 this or that or the other characteristic would be
18 useful in certain markets and back it up by saying
19 either we have a survey to that effect or that
20 particular kind of ball made by this particular kind
21 of manufacturer is selling well these days or
22 something of that sort. But that's not a broad-based
23 expertise of market analytical type.

24 Q. Have you conducted any studies of the golf
25 ball market since, let's say, 2000 and what's driven

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1 the success of various balls in that market?

2 A. I've not conducted a specific study.

3 Q. Have you had any conducted at your
4 direction?

5 A. No.

6 Q. Have you seen any sales figures for the
7 Pro V1, Rule 35 ball, and other golf balls in the
8 golf ball market?

9 A. If I have, it's rather incidental,
10 something that I might see in a golf magazine or
11 something.

12 Q. For the purposes of your analysis that's
13 set forth in your report, did you review any of that
14 sort of material?

15 A. Well, I saw some advertisements and other
16 marketing pieces that were provided and listed in the
17 back; but apart from that, nothing other than my
18 general knowledge and general reading.

19 Q. Have you ever seen any figures on how much
20 Acushnet spends on marketing?

21 A. Not -- I've heard some rumors about it many
22 years ago, but I haven't heard anything about it
23 recently.

24 Q. What were the rumors many years ago?

25 A. That they spent a lot of money supporting

1 professionals on tour.

2 Q. Have you seen any figures about how much
3 they spend on their tour strategy?

4 A. No.

5 Q. Have you seen any comparisons of Acushnet's
6 spending on marketing and tour strategy as compared
7 to other golf ball companies?

8 A. Pardon me. Was the first part of that
9 question, have I seen figures?

10 Q. Yes.

11 A. No.

12 Q. Have you seen any comparison, qualitative
13 or quantitative, between what Acushnet spends on
14 marketing and tour spending as opposed to other golf
15 ball companies?

16 A. Have I heard any comparison?

17 Q. Have you seen any comparison?

18 A. I don't think I've seen any comparisons
19 about spending in that regard.

20 Q. Have you seen any data regarding the amount
21 of money that Acushnet spends on developing its on-
22 and off-course distribution channels?

23 A. I haven't seen data.

24 Q. Have you seen any information with respect
25 to that information?

1 A. I have not seen any.

2 Q. Have you heard any?

3 A. Sure. People talk in the field all the
4 time about how much Acushnet spends on developing the
5 tour. In fact, not just the main PGA tour, but the
6 LPGA tour and the -- I think it's now called the
7 nationwide tour, the secondary professional tour
8 providing product to college and high school teams,
9 junior tournaments, tournaments within the Titleist
10 professional groups, I believe, and advertising in
11 general.

12 Q. My question was more specifically tailored
13 to development of on-course distribution channels and
14 off-course distribution channels like retail outlets,
15 things like that. Have you seen any data or heard
16 any data about how much Acushnet spends to develop
17 that network of distribution channels?

18 A. I've certainly not seen any data. And I
19 don't believe I've heard any. If I have, it's very
20 general kind of scuttlebutt within the field.

21 Q. Do you have any information about how much
22 Callaway spends to develop its distribution channels?

23 A. No.

24 Q. What about how much Callaway spends on its
25 tour strategy and marketing?

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1 A. I don't have any data on that at all.

2 Q. Now, you have set forth in your expert
3 report a number of opinions with respect to
4 commercial success, correct, starting on paragraph 211?

5 A. Yes.

6 Q. Now, in this report, you express your
7 opinion that the commercial success of the Pro V1
8 golf ball is due primarily to the Sullivan patents,
9 right?

10 A. Yes. To the product itself, yes.

11 Q. I'm sorry. Did you say "to the product"?

12 A. To the product itself, sure.

13 Q. My question was, is it your opinion that
14 the commercial success of the Pro V1 product is due
15 to primarily the technology that's claimed in the
16 patents-in-suit?

17 A. Primarily, yes.

18 Q. And in the course of expressing those
19 opinions, you express a lot of opinions about what
20 drives people to buy golf balls and, in particular,
21 what drives people to buy the Pro V1 golf ball,
22 right?

23 A. Right.

24 Q. What sources of information do you base
25 your knowledge and opinions about that question on?

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1 MR. SHUMAN: Objection. Form.

2 THE WITNESS: May I respond?

3 BY MR. ROSENTHAL:

4 Q. You can answer. Yes.

5 A. The ball construction and performance --
6 the Pro V1, at least the original one, and I believe
7 the other ones in a derivative sense, have gained a
8 reputation of having the kind of performance that
9 good players want to achieve. And the performance is
10 closely associated with the construction and
11 properties that are imparted by the Sullivan patent.

12 Q. One of the aspects of your opinion, as I
13 understand it, is that you believe that that
14 construction is the primary driving force behind the
15 demand for the golf ball, right?

16 A. Yes.

17 Q. My question is, on what sources of
18 information do you base your opinion that the
19 construction and performance of the golf ball is the
20 primary driving factor of its demand?

21 A. Well, some of it has to do with the way in
22 which the advertising reflects the opinions about
23 performance. And that is a way of communicating to
24 golfers, the ones who actually buy golf balls, as
25 opposed to the pros. And that advertising is

1 designed to communicate certain performance
2 characteristics. And I've seen a lot of those ads,
3 both by reading golf magazines and by the particular
4 ads and marketing material that are referred to in
5 the report.

6 Q. Have you ever seen any studies about the
7 effect that brand loyalty has on golfers' choice of
8 golf balls?

9 A. I don't think I've seen studies.

10 Q. Have you ever seen any studies on the
11 effect that the fact that tour players play
12 particular balls has on golfers' choices of golf
13 balls to buy?

14 A. I have not seen studies.

15 Q. Have you seen any information about that
16 topic?

17 A. I'm not sure it would qualify as information.
18 I've heard people write -- I have heard people talk
19 about it and I've seen people write about it in
20 magazines, but it mostly is characterized, by me at
21 least, as opinion.

22 Q. What is your opinion with respect to the
23 effect of pro players playing a golf ball on the
24 demand for that golf ball in the marketplace?

25 A. I think it has some effect. And I think

1 that's why golf companies pay professionals to play
2 their golf ball or play their golf clubs or do
3 whatever kind of marketing and advertising they do.
4 But it's only a part of the picture. It's not even a
5 very big part of the picture sometimes because most
6 club players -- the ones who actually buy golf
7 balls -- don't view themselves as professionals, and
8 they take word of mouth from other people in their
9 own clubs or their own golf outing groups, and very
10 often they follow other kinds of trends if it's
11 simply a matter of what properties they're looking
12 for. There were a period when very soft golf balls
13 were a fad. There were other kinds of periods.
14 So they tend to follow performance, I think.

15 Q. And you've characterized what the golf ball
16 marketplace generally does in terms of what
17 influences their decisions and the relative
18 importance of golf pros versus what their friends and
19 golf pros are playing and word of mouth and
20 performance. What do you base your opinion on how
21 all those things interplay with one another?

22 MR. SHUMAN: Objection. Form.

23 THE WITNESS: Well, to the extent that I
24 can reflect what my personal experience is, it's, of
25 course, limited to my personal experience, which

1 means playing with some limited number of people in
2 Rhode Island and Massachusetts and Florida and
3 Arizona and various places that I've played.

4 I see reflected in some of the golf
5 advertising and marketing, as well as in the way
6 people in the industry speak, that golfers are
7 influenced by a number of things. In particular, the
8 performance of the ball relative to their own ability
9 and the courses on which they play.

10 And some golfers -- in fact, many
11 golfers will buy products that have as their primary
12 characteristics that they are very good at providing
13 distance. And others will select balls that feel
14 fairly soft when they hit them. Others will
15 provide -- play ones which get the ball up in the air
16 pretty fast. They have a high spin rate.

17 The performance characteristics of
18 the Pro V1 and other golf balls that are based on the
19 Sullivan technology has a combination of properties
20 that attracts a wide range of golfers.

21 BY MR. ROSENTHAL:

22 Q. The first part of your answer, I think you
23 were addressing what I asked, which was what you base
24 your opinion about what guides these choices. Am I
25 correct in saying that that's primarily based on your

1 personal opinion and your personal observations?

2 A. Plus confirmation of it by what I read in
3 the golf magazines and hear in the industry. But
4 it's certainly not primarily on formal statistically
5 graded studies.

6 Q. Now, in your report -- and we'll get to
7 this -- you rely on declarations of Davis Love,
8 Jr. -- or Davis Love, III, I should say, and Jerry
9 Bellis; is that right?

10 A. Yes.

11 Q. Why did you rely on the statements which
12 are contained in those declarations?

13 A. Well, statements from professionals are
14 statements based on the experience of people who have
15 enough skill to tell how the ball actually performs,
16 whereas for most people the performance of a shot is
17 a reflection not only of the ball, but of a lot of
18 other conditions. Professionals can control those
19 conditions a lot better than most other people.
20 And so it's good to do that. That's one reason to
21 ask for such opinions.

22 Q. With respect to -- Let's continue just
23 discussing Mr. Love. Is it fair to say that a
24 professional like Mr. Love is in a good position to
25 reliably discuss what performance attributes of the